

**REMARKS**

The Office Action rejected claims 1-6, 8, 9, 13-17, 20, 21 and 24-26 under 35 U.S.C. § 103 as obvious over U.S. patent application publication no. 2003/0108501 (“Hofrichter”); claims 1-3, 5-15, 17-21 and 24-26 under 35 U.S.C. § 103 as obvious over U.S. patent 5,955,415 (“Gutierrez”) and claims 7, 10-12 and 18 under 35 U.S.C. § 103 as obvious over Hofrichter in view of Gutierrez.

On July 13, 2006, Applicants filed an Amendment demonstrating that no *prima facie* case of obviousness exists in this case. Applicants respectfully submit that for this reason alone the § 103 rejections are improper and should be withdrawn.

Moreover, submitted concurrently herewith is a Rule 132 declaration demonstrating the surprising and unexpected properties associated with the claimed invention. Thus, even assuming *arguendo* that a *prima facie* case of obviousness exists in this case, Applicants respectfully submit that such a hypothetical *prima facie* case would be sufficiently rebutted by the surprising and unexpected properties associated with the claimed invention. For this reason as well Applicants respectfully submit that the § 103 rejections are improper and should be withdrawn.

Specifically, in the Rule 132 declaration, an invention composition and four comparative compositions were prepared. (Rule 132 dec., par. 3). These compositions were virtually identical except for the amount of polyethyleneimine (PEI) and solid mineral particles (calcium carbonate) present. (Rule 132 dec., par. 3). The invention composition contained PEI and solid mineral particles in a ratio of 0.0027. (Rule 132 dec., par. 3).

Comparative composition no. 1 contained PEI and solid mineral particles in a ratio of 0.1667; comparative composition no. 2 did not contain any solid mineral particles; and comparative composition nos. 3 and 4 did not contain any PEI. (Rule 132 dec., par. 4). Also, comparative composition nos. 3 and 4 contained different amounts of solid mineral particles. (Rule 132 dec., par. 4).

1 gram of each composition was applied to virgin hair locks (20 cm long, 2.7 g weight) for 5 minutes, the hair was rinsed, and the hair was dried for 30 minutes at 70°C. (Rule 132 dec., par. 5).

The smoothness of the dried hair locks was evaluated by six experts using the following scale: 0 corresponded to very bad smoothness (no slip, great difference between the root and the end of the hair), while 5 corresponded to very good smoothness (good slip, no difference between the root and the end of the hair, touch was homogeneous and not loaded). (Rule 132 dec., par. 6). Thus, the higher the number resulting from this evaluation, the better smoothness properties the composition possessed. (Rule 132 dec., par. 6). Such evaluative methods are commonly used in the cosmetics industry generally and in our laboratories specifically. (Rule 132 dec., par. 6). The results of the testing are set forth in the following table.

	Invention composition	Comparative Composition No. 1	Comparative Composition No. 2	Comparative Composition No. 3	Comparative Composition No. 4
Smoothness of dried hair (mean)	3	2.2	1.5	1.5	2.4

The experts noted a marked improvement of the smoothness of hair treated with the invention composition containing 3 g of solid mineral particles and 0.008 g of PEI. (Rule 132 dec., par. 6). Surprisingly, however, compositions containing either 3 g of solid mineral particles (comparative composition no. 2) or 0.008 g of PEI (comparative composition no. 3) possessed extremely poor smoothness properties. (Rule 132 dec., par. 6).

Furthermore, it was surprising that comparative composition no. 1 which contained PEI/solid mineral particles in a ratio of 0.1667 contained worse smoothness properties than comparative composition no. 4 (a composition which contained the same amount of PEI as comparative composition no. 1 (0.5 g) but which did not contain any solid mineral particles). (Rule 132 dec., par. 7). This demonstrated that the combination of PEI and solid mineral particles does not always or necessarily result in improved smoothness properties. (Rule 132 dec., par. 7).

Thus, the invention composition imparted hair with vastly different smoothness properties compared to the comparative compositions. (Rule 132 dec., par. 8). This vast difference in cosmetic properties was surprising and unexpected given the similarity of the compositions. (Rule 132 dec., par. 8).

The improved smoothness properties obtained with the invention composition are representative of the present invention. (Rule 132 dec., par. 9). That is, it would be expected that shampoo or conditioner compositions containing a cosmetically acceptable medium, solid mineral particles comprising at least one element selected from the group consisting of columns IIa, IIIa and IVa of the Periodic Table of the Elements, and at least one polyalkyleneimine, wherein the polyalkyleneimine/mineral

particle weight ratio is 0.1-0.0001, would possess improved smoothness properties like those of the exemplified invention composition. (Rule 132 dec., par. 9).

The difference in smoothness properties between the invention composition and the comparative compositions demonstrates the surprising and unexpected benefit derived from having the claimed solid mineral particles and the claimed PEI in the required ratio in the invention compositions. (Rule 132 dec., par. 10).

What's more, the improved smoothness properties associated with the invention compositions are commercially significant. (Rule 132 dec., par. 11). Clearly, shampoos or conditioners which increase the smoothness properties of hair to which they have been applied are more commercially viable than shampoo or conditioner compositions which do not provide hair with increased smoothness upon application. (Rule 132 dec., par. 11).

Thus, the Rule 132 declaration demonstrates that the claimed compositions requiring the presence of PEI and solid particles in a specified ratio possess significantly better properties/characteristics than comparable compositions containing PEI alone, solid particles alone, or PEI and solid particles in a ratio falling outside of the claimed ratio, and that these differences are commercially significant. Such differences in properties/characteristics between the invention compositions and the closely-related comparative compositions were surprising and unexpected, nor were they taught or suggested by the cited art.

In view of the above, and for all of the reasons set forth in the Amendment filed July 13, 2006, Applicants respectfully request reconsideration and withdrawal of the rejections under 35 U.S.C. § 103.

Application No. 10/718,531

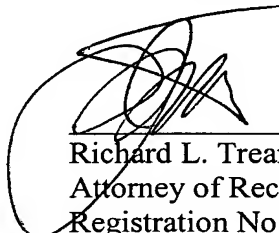
Further Response to Office Action dated February 13, 2006

Applicants believe that the present application is in condition for allowance.

Prompt and favorable consideration is earnestly solicited.

Respectfully submitted,

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A handwritten signature in black ink, appearing to be 'Richard L. Treanor', is written over a horizontal line.

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